



## United States Department of the Interior

OFFICE OF SURFACE MINING  
Reclamation and Enforcement  
Western Region Office  
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30 May 2018

Distributed by email.

U.S. Fish and Wildlife Service  
New Mexico Ecological Services Field Office  
Attn: Mr. Nathan Franssen, PhD  
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**Re: Four Corners Power Plant and Navajo Mine Energy Project  
Biological Opinion, 2017 Annual Report  
Consultation # 02ENNM00-2014-F-0064  
OSMRE Pinabete Mine Permit NN.NM-0042A**

Dear Dr. Franssen,

As discussed; please let this letter and its attachments serve as the 2017 Annual Report required in the FCPP-NMEP BO.

**Summary of RPMs and Terms and Conditions, followed by implementation actions taken in Calendar Year 2017 in blue:**

1. Federal agencies' efforts to reduce atmospheric Hg deposition and Se loading in the San Juan River Basin.
  - a. OSMRE Evaluation of Permitting Actions for Potential Hg Deposition in the San Juan River:

Kayenta Mine: As previously reported; the Kayenta Mine-Navajo Generating Station (KMC-NGS) project has been suspended. Until suspension occurred; OSMRE continued to participate in the consultation process as previously documented. Should the project be revived in any form; OSMRE will resume with the required consultation(s).

OSMRE continued to informally consult with Phoenix USFWS personnel in the Phoenix, AZ office as well as keeping the Ecological Services Office in Albuquerque, New Mexico updated on the Kayenta Mine 5-year Permit Renewal process similarly to the KMC-NGS project described above. On September 19, 2017 OSMRE received a concurrence letter for our renewal BA from USFWS (Attachment 1). OSMRE approved the Permit Renewal on October 3, 2017.

San Juan Mine: OSMRE submitted the BA for the San Juan Mine Deep Lease Extension project to USFWS Ecological Services Office in Albuquerque, New Mexico

on May 14, 2018 seeking concurrence with a determination of may affect, not likely to adversely affect the Southwestern Willow Flycatcher, Yellow-billed Cuckoo, Colorado Pikeminnow, Mancos Milkvetch, Mesa Verde Cactus, and Razorback Sucker.

King II Mine: OSMRE received an August 16, 2017 letter of concurrence (Attachment 2) for the King II Mine Expansion BA which determined the proposed action may affect but is not likely to adversely affect the Rio Grande silvery minnow and its critical habitat, greenback cutthroat trout, Colorado pikeminnow and its critical habitat, and the razorback sucker and its critical habitat. The Mining Plan Decision Document was subsequently approved on March 27, 2018.

**b. BIA Se Loading Study**

USGS was awarded the contract to conduct the study at their Yankton, SD facility. Attachments 3 through 7 contain the USGS Quarterly Reports on the BIA Funded Se Study. The "*USGS Quarterly Report\_ October-December 2016,*" (Attachment 3) is included now; as it was not received by OSMRE in time to include it in the previous CY 2016 annual report.

**2. River Station Pumping Plan**

The San Juan River Pumping Plan has been fully implemented: a) the pump train sumps were connected in July, 2017 thereby reducing intake velocity, b) a two week River Pumping Station outage occurred in November 2017 beginning on the day CPM were stocked upstream, and c) intake screens were maintained.

**3. Non-native Species Escapement Plan**

A fish escapement prevention device (wedge-wire screen) was installed on Morgan Lake Blowdown and was placed in service in December, 2017. A presentation was made to the SJRRIP Biology Committee in February, 2018 demonstrating successful completion of the project. An email was received from USFWS on 29 May 18 (Attachment 8) noting compliance with this RPM.

APS printed an educational brochure with input from USFWS and NNDFW to help prevent non-native fish introduction to Morgan Lake and the San Juan River. Brochures were distributed to USFWS and NNDFW.

**4. Recovery Action Funding**

APS received confirmation that full payment was received by NFWF on January 26, 2018, including \$442,276.00 by APS and \$110,569.00 by NTEC, for a total of \$552,845.00. USFWS also provided OSMRE with their 2017 (Attachment 9) annual report responsive to this RPM.

**5. OSMRE, USEPA, USFWS, Project Proponents coordination of ESA consultation for future NPDES permits (Attachment 10)**

Pursuant to RPM 5a through f: USEPA finalized the NPDES permit, factsheet, and response to comments document for the NTEC Navajo Mine (NN0028193) and issued the permit in March 2018.

USEPA is in the process of finalizing the APS FCPP NPDES Permit (NN0000019) which is expected to be issued in June 2018.

Pursuant to RPM 5 f: USEPA will include the use of sufficiently sensitive methods to monitor pollutants including selenium and mercury in the final issued permit.

RPM 5 a. through e., will be implemented during the next permit cycle about 5 years after the final issuance of the current proposed permits.

6. Spill Contingency and Countermeasure Plan

APS submitted a Spill Contingency and Countermeasure Plan for on-site ash impoundments in December 2017 for USFWS approval. The Plan consists of 1) an introductory white paper, 2) Attachment 1: Emergency Action Plan, 3) Attachment 2: Inundation Maps with potential T&E species overlays. On 29 May 2018 USFWS sent an email indicating the plan is fully responsive to this RPM (Attachment 11).

7. Flycatcher and Cuckoo Protocol Surveys

a. Deposition Area (FCPP) Protocol Survey Results

Yellow-billed cuckoo and Southwest willow flycatcher protocol surveys were completed in 2017. The survey report was submitted to OSMRE and USFWS in November of 2017. Willow flycatchers were detected at Nenahnezad and Morgan Lake (May 15-31), when both migrant and resident willow flycatchers could be detected. No willow flycatchers were detected in subsequent surveys, indicating that willow flycatchers detected during the initial survey visit were likely migrants. This (2017) was the first year of surveys for Chaco Wash – the third survey site in 2017 for FCPP – which had no detects (Attachment 12).

In 2017, approximately 85 acres were surveyed at three sites for yellow-billed cuckoo: 11 acres near Harper Hill on lands managed by the Bureau of Land Management (BLM) Farmington Field Office; 20 acres on Navajo Nation land near the San Juan Chapter House south of the San Juan River; and 55 acres north of the San Juan River downstream from Shiprock, New Mexico. The San Juan River site, surveyed in 2016, was treated for removal of invasive tamarisk (*Tamarix* spp.) and Russian olive (*Elaeagnus angustifolia*). Biologists noted that it was no longer considered suitable yellow-billed cuckoo habitat and would not be surveyed in 2017. Two new sites were added in 2017: San Juan Shiprock site and San Juan Chapter site. No yellow-billed cuckoos were detected during surveys (Attachment 12).

b. Navajo Mine Protocol Survey Results

Southwest willow flycatcher protocol surveys were completed in 2017. Ecosphere submitted the report to the USFWS New Mexico Ecological Services Office by August 15, 2017. OSMRE received the report as part of the Navajo Mine's Annual Report. Ecosphere conducted southwestern willow flycatcher surveys in suitable habitat within the Navajo Mine Lease Area. Survey areas included a stock pond at Pinabete Wash and Chinde Wash on Navajo Mine.

Nesting habitat for the species within the two survey areas was reported as low quality and likely suitable only for migratory individuals. Nine singing willow flycatchers were detected in tamarisk at the Pinabete Wash Stock Pond Survey Area on May 18, 2017.

Storms moving through northwestern New Mexico on days leading up to the first survey period may have "knocked" migrating flycatchers out of their flight paths, and caused individuals to rest in suitable stop-over habitat until inclement weather had moved out of the region. This may explain the large number of flycatchers observed on this particular day. No flycatchers were detected in subsequent surveys. Because these flycatchers were detected early in the breeding season, Ecosphere concluded these birds were likely migratory. No flycatchers were detected in Chinde Wash during any of the survey periods (Attachment 13).

### **Additional Reporting as per the Terms and Conditions 8(a)**

#### **Project Status**

No significant modifications to the Proposed Action.

#### **Take**

No take observed. Authorized take was not exceeded.

#### **Species Monitoring and Protocol Surveys**

Yellow-billed cuckoo and Southwest willow flycatcher protocol surveys were completed in 2017. The survey reports were submitted to OSMRE and USFWS.

#### **Annual Estimated Atmospheric Emissions of Hg and Se**

For 2017: Hg = 38.25 lbs, Se = 280 lbs.

#### **Additional Relevant Habitat Mapping and Monitoring**

FCPP: Ash impoundment maps with potential habitat overlays were completed. The potential habitat was identified by modelling completed for the recent NEPA process.

Navajo Mine: None to report.

#### **Water quality monitoring data that exceeded NPDES permit limits**

FCPP: NPDES exceedences for 2017 are listed below:

1. Four Corners Steam Electric Station exceeded the maximum daily concentration limit for total residual chlorine to the cooling water canal outfall 01A on November 7, 2017. The permit limit is 0.2 mg/L. The concentration result was 0.3 mg/L.
2. Four Corners Steam Electric Station exceeded the weekly NPDES permit limit for Oil & Grease at Internal Outfall 01A for the sample obtained on November 13, 2017. The analytical result was 56.9 mg/L which exceeded the Oil & Grease Daily Maximum limit of 20.0 mg/L and ultimately, the monthly average limit 15.0 mg/L.

Navajo Mine: In 2017, no discharge events occurred at any known outfall locations.

#### **Spill Contingency Countermeasure plans or drills conducted by FCPP**

A drill/table top exercise as recognized by San Juan County Office of Emergency Management and the New Mexico State Engineer for the SCCP was completed in 2017.

**Status of Recovery Actions taken**

See USFWS report (Attachment 9).

**Other Reports and Plans**

OSMRE has ensured the USFWS has received electronic copies of all reports and plans related to implementation of these RPMs and Terms and Conditions in a timely manner throughout 2017, as well as ensured close coordination throughout the year through periodic meetings and other means (e.g. telecons, etc). A hard copy of the educational brochure was hand delivered on 17 May 17.

Please do not hesitate to contact me if you have questions, concerns, or need additional information; otherwise OSMRE assumes this meets the 2017 annual reporting requirements.

Sincerely,



Alex Birchfield  
Senior Ecologist  
FCPP-NMEP BO Implementation Coordinator

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